

CLAIMS

1. Apparatus for automatic delivering of paste food products, particularly ice cream and/or yoghurt, comprising a housing, within which a plurality of containers of said paste food products are provided, each one of said containers providing means for distributing said paste food products, and refrigeration means for said plurality of containers, and apparatus programming means, said apparatus being characterised in that said housing provides a rotating base, having at least one seat supporting a tray for receiving said paste food products from said plurality of containers, said rotating base moving in such a way to place said tray under one of said containers according to the sequence programmed by said programming means, said distribution means delivering said paste food products within said tray when it is in correspondence of the specific paste food product container.
2. Apparatus according to claim 1, characterised in that said paste food product containers are comprised of cylinders and they can be provided in a substantially vertical position.
3. Apparatus according to one of the preceding claims, characterised in that said refrigeration means comprise a refrigerator motor, a refrigeration coil provided inside the wall of said housing, and glycol provided inside said housing, in such a way to occupy the space between said paste material containers.
4. Apparatus according to one of the preceding claims, characterised in that said housing provides an insulating part, comprising an interspace, that can include said refrigeration coil.
5. Apparatus according to one of the preceding claims, characterised in that said containers of said paste food products are provided along the proximity of the edge of said container.
6. Apparatus according to one of the preceding claims, characterised in that it provides at least a reserve container, provided inside said housing.
7. Apparatus according to one of the preceding claims, characterised in that it provides at least a receiving tray distributor receiving the paste substance to be placed in at least one seat.

8. Apparatus according to one of the preceding claims, characterised in that said seat for said tray is substantially realised in correspondence of the outer edge of said rotating base.

5 9. Apparatus according to one of the preceding claims, characterised in that said tray is comprised of a con or of a cup.

10 10. Apparatus according to one of the preceding claims, characterised in that said tray is placed in correspondence of the paste product container in a position substantially decentred with respect to the outlet of the container since it is moved by pneumatic mechanical means.

15 11. Apparatus according to one of the preceding claims, characterised in that said paste food products delivering means, such as ice cream and/or yoghurt, comprise a piston, a body containing said paste food products and means for delivering said paste food products, said delivering means comprising a delivery mouth, said piston compressing the mass of said paste food products toward said delivery means, and said delivery means automatically opening said delivery mouth of said paste food products and automatically closing said mouth after the end of the compression of said piston on said paste food products.

20 12. Apparatus according to claim 11, characterised in that said piston comprises an upper wall, a lower wall and a bellow provided between said upper wall and said lower wall, said lower wall pushing said paste food products downward, and said piston can comprise a tube for flow of compressed air within said bellow, preferably through said upper wall.

25 13. Apparatus according to claim 11 or 12, characterised in that said housing has a cylindrical shape comprised of insulating material.

30 14. Apparatus according to one of the preceding claims 11 – 13, characterised in that said tube for flow of compressed air within said bellow passes through said housing.

35 15. Apparatus according to one of the preceding claims 11 – 14, characterised in that said delivery means comprise a substantially conical shaped nut and a portion delivering element, comprising said mouth, coupled at the lower base of said nut.

16. Apparatus according to one of the preceding claims 11

- 15, characterised in that said mouth provides a plurality of tabs, said tabs remaining open during the delivery of said paste food product, and retracting after the end of the pressure of said paste food products, thus closing said mouth.

17. Apparatus according to one of the preceding claims 11

- 16, characterised in that said mouth is comprised of plastic material with memory effect.

18. Apparatus according to one of the preceding claims 11

- 17, characterised in that said paste food product delivery means comprise an envelope for packaging said paste food products, such as a film, preferably a polypropylene or polyethylene film.

19. Means for automatic delivering of paste food products, such as ice cream and/or yoghurt, characterised in that it comprises a piston, a housing containing said paste food products ad means for delivering said paste food products, said delivery means providing a delivery mouth, said piston pressing the mass of said paste food products toward said delivery means, and said delivery means automatically opening said paste food products delivery mouth and automatically closing said mouth in consequence of the end of the compression action of said piston on said paste food products.

20. Delivery means according to claim 19, characterised in that said piston comprises an upper wall, a lower wall and a bellow provided between said upper wall and said lower wall, said lower wall pushing said paste food products downward, and said piston can comprise a tube for flow of compressed air within said bellow, preferably through said upper wall.

21. Delivery means according to claim 19 or 20, characterised in that said housing has a cylindrical shape comprised of insulating material.

22. Delivery means according to one of the claims 19 - 21, characterised in that said tube for flow of compressed air within said bellow passes through said housing.

23. Delivery means according to one of the claims 19 - 22, characterised in that characterised in that said delivery means comprise a substantially conical shaped nut and a portion delivering element, comprising said mouth, coupled at the lower base of said nut.

24. Delivery means according to one of the claims 19 - 23,
characterised in that said mouth provides a plurality of tabs, said tabs
remaining open during the delivery of said paste food product, and
retracting after the end of the pressure of said paste food products,
thus closing said mouth.

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25. Delivery means according to one of the claims 19 - 24,
characterised in that said mouth is comprised of plastic material with
memory effect.

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26. Delivery means according to one of the claims 19 - 25,
characterised in that said paste food product delivery means comprise
an envelope for packaging said paste food products, such as a film,
preferably a polypropylene or polyethylene film.

27. Apparatus according to each one of the preceding
claims, substantially as illustrated and described.